

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-4. (Cancelled)

5. (New) An optical switch device which has a movable member mounted with a light-reflecting member for reflecting light that is incident from a Z-direction, and emitting the light in the Z-direction from a prescribed position offset in an X-direction; a fixed-side member for movably supporting the movable member in the X-direction and a Y-direction; and drive means for driving the movable member in the X-direction and the Y-direction, the X-direction, Y-direction, and Z-direction being perpendicular to each other, comprising:

a clamp mechanism provided with a pushing member for switching between a clamped state in which the movable member is pressed along the Y direction and fixed to the fixed-side member, and an unclamped state in which the pressing of the movable member along the Y direction is released; and

a clamping magnetic drive circuit for driving the pushing member, said clamping magnetic drive circuit having a clamping coil disposed on a first member selected from one of the pushing member and the fixed-side member, and a clamping magnet disposed on a second member comprising the other of the pushing member and the fixed-side member for generating magnetic flux that interlinks with the clamping coil, wherein the clamping coil is wound so that it is formed with an opening facing the second member and the clamping magnet is provided with a pair of magnets that project from the second member to the first member, and wherein

said pair of magnets is disposed with different poles facing each other and are made to hold the clamping coil from the inside and outside of said opening.

6. (New) The optical switch device according to Claim 5, wherein the clamp mechanism further comprises a back yoke positioned behind said pair of magnets inside and outside said opening of the clamping coil.

7. (New) The optical switch device according to Claim 5, wherein the clamp mechanism further comprises an urging member for urging said pushing member into said clamped state or said unclamped state, and wherein said clamping magnetic drive circuit is able to move the pushing member against an urging force of the urging member.

8. (New) An optical switch device with a movable member mounted with a light-reflecting member for reflecting light that is incident from a Z-direction, and emitting the light in the Z-direction from a prescribed position offset in an X-direction, a fixed-side member for movably supporting the movable member in the X-direction and a Y-direction and drive means for driving the movable member in the X-direction and Y-direction, the X-direction, Y-direction and Z-direction being perpendicular to each other, comprising:

a clamp mechanism provided with a pushing member for switching between a clamped state in which the movable member is pressed and fixed to the fixed-side member, and an unclamped state in which the movable member is released; and

a clamping magnetic drive circuit for driving the pushing member, wherein

the clamping magnetic drive circuit has a clamping coil, disposed on a first member comprising one of the pushing member and the fixed-side member, and a clamping magnet for generating magnetic flux that interlinks with the clamping

coil, disposed on a second member comprising the other of the pushing member and the fixed-side member,

the pushing member is supported on the fixed-side member in a manner that it can swing along the Y-direction,

the movable member is disposed between the pushing member and the fixed-side member along the Y-direction on one side of a swing center of the pushing member, and the clamping magnetic drive circuit is disposed between the pushing member and the fixed-side member on the other side of the swing center thereof, and

the clamping magnet and the clamping coil are disposed so as not to stack along the Y direction.

9. (New) The optical switch device according to Claim 8, wherein said clamping coil is wound so that it is formed with an opening facing said second member,

the clamping magnet is provided with a pair of magnets that project from said second member to said first member, and

said pair of magnets is disposed with different poles facing each other and are made to hold the clamping coil from the inside and outside of said opening.

10. (New) The optical switch device according to Claim 9, wherein the clamp mechanism further comprises a back yoke positioned behind said pair of magnets inside and outside said opening of the clamping coil.

11. (New) The optical switch device according to Claim 8, wherein said clamp mechanism further comprises an urging member for urging said pushing member into said clamped state or said unclamped state, and wherein said clamping magnetic drive circuit is able to move the pushing member against an urging force of the urging member.